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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,115	01/14/2002	David Appleyard	48903 DIV	6661
26474	7590	04/23/2004	EXAMINER	
KEIL & WEINKAUF 1350 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			LU, C CAIXIA	
			ART UNIT	PAPER NUMBER

1713

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,115

Applicant(s)

APPLEYARD ET AL.

Examiner

Caixia Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Request for Continued Examination

1. The request for continued examination (RCE) under 37 C.F.R. § 1.114 of filed on March 23, 2004 is acceptable. An action on the RCE follows.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

1. Claims 1, 2, and 4-5 are rejected under 35 U.S.C. 103(a) as obvious over Kashiwa et al. (US 4,668,753) for the same rationale as set forth in the previous office actions, Papers No. 12 and No. 14.

Response to Arguments

2. Applicant's arguments filed on March 23, 2004 have been fully considered but they are not persuasive.

Applicants argue that "Kashiwa's catalyst differs from the present catalyst in having a lower internal donor to MgCl_2 ratio ...". It is the examiner's position that those differences are not relevant because those limitations is not in the instant claims.

Applicants argue that "the external donor and the aluminum compound/external donor ratio both differ between the present catalyzation procedures". This is incorrect. First of all, the external electron-donor of the instant claims do not exclude Kashiwa's external electron-donor of diphenyldimethoxysilane of Examples 1-3; and secondly, Kashiwa's molar ratio of aluminum to external electron-donor of diphenyldimethoxy-

silane is 16 (calculated from 251/15) which is in the range of the instant claims (col. 10, line 66-69).

Based the incorrect conclusions as analyzed by the examiner as shown above, applicants make assertion that "[T]he burden now shifts to the examiner to demonstrate why these claim elements would necessarily be present in the Kashiwa polymer". Again, because the examiner has shown that Kashiwa's polymer's composition encompasses those of the instant claims and process of making the polymer is identical or substantially identical as those of the instant claims, one would have expected Kashiwa's polymer to have identical or substantially identical structure as the polymer of the instant claims. When the two polymers are deemed to be identical or substantially identical, they must inherently share the same characteristics such as cold-xylene-soluble fraction and processability index.

Applicants assert that "Yamagihara results are valid only to the extent of their disclosure and applicability". This is incorrect. The soluble fraction in solvent such as xylene or hexane of isotactic polypropylene is due to the stereo irregular portions in the polymer chains which prevent the polymer chains from forming crystals and became non-soluble fraction. Thus, Yamagihara's results do provide sufficient evidences for what is well known in the art. **Applicants are requested to provide references to support the statement that "isotactic index and cold-xylene-soluble fraction are not generally correlative".**

Applicants argue that "there would be no motivation for the skilled artisan to pursue the upper range of ethylene disclosed in Kashiwa, or to exceed these ranges, as

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Kashiwa taught this to be less suitable than lower ranges". Applicants cite col. 3, lines 41-44. This is incorrect. First of all, nowhere in Kashiwa's patent discloses that the ethylene content in Kashiwa's polymer near or at the high end of 2.0 mol% (equivalent to 1.3 wt%) will not work. Secondly, as correctly cited by the applicant, Kashiwa's preferred ethylene content in the polymer is in the range of 0.1 to 1.5 mol%: the 1.5 mol% converts to 1.0 wt% which is right in the middle of the claimed range of 0.7-1.4 wt%. There is no better motivation than the direct teaching of the limitation.

As for applicant's Comparative Example B analysis, neither applicants have yet indicated nor the examiner is able to identify the criticality and unexpected results.

Conclusion

3. This is a RCE. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (571) 272-1106. The examiner can normally be reached from 9:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (571) 272-1114. The fax numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.



Caixia Lu, Ph. D.
Primary Examiner
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